

# 79158

## SEARCH REQUEST FORM

U.S. DEPARTMENT OF COMMERCE  
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Requestor's Name: T.J. CRIAPES Serial Number: 09/8880,881  
Date: 10/31/02 Phone: 308-4607 Art Unit: 1617  
2B19 RM CM 12A03

### Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Please search Patent  
# 5,556,838  
to determine if is  
in litigation.  
Thank you

Point of Contact:  
Mona Smith  
Technical Information Specialist  
CM1 6A01  
Tel: 308 3778

10/31/02  
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\_\_\_\_ A.A. Sequence  
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Vendors  
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Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) ⓘ  
Terms: **patno=5556838** ([Edit Search](#))

08245970 (08) 5556838 September 17, 1996

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT  
**5556838**

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September 17, 1996

Inhibiting the development of tolerance to and/or dependence on an addictive substance  
**REISSUE:** June 15, 2001 - Reissue Application filed Jun. 15, 2001 (O.G. Aug. 21, 2001) Ex. Gp.: 1614; Re. S.N. 09/880,881 August 21, 2001

**INVENTOR:** Mayer, David J., Richmond, VA; Price, Donald D., Richmond, VA; Mao, Jianren, Richmond, VA; Lyle, John W., Belmar, NJ

**APPL-NO:** 08245970 (08)

**FILED-DATE:** May 19, 1994

**GRANTED-DATE:** September 17, 1996

**ASSIGNEE-AT-ISSUE:** Virginia Commonwealth University, Richmond, VA

**CORE TERMS:** morphine, receptor, tolerance, activation, addictive, sub, rat, ganglioside, protein, intracellular ...

**ENGLISH-ABST:**

Nontoxic substances that block the N-methyl-D-aspartate (NMDA) receptor, e.g., a morphinan such as dextromethorphan or dextrorphan, or that block a major intracellular consequence of NMDA-receptor activation, e.g., a ganglioside such as GM.sub.1 or GT.sub.1b, a phenothiazine such as trifluoperazine or a naphthalenesulfonamide such as N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide, inhibit the development of tolerance to and/or dependence on addictive drugs, e.g., narcotic analgesics such as morphine, codeine, etc.

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Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) ⓘ  
Terms: **patno=5556838** ([Edit Search](#))  
View: [Custom](#) - [Modify](#)  
Segments: Abst, Appl-no, Applicants-ref, Assign-type, Assignee, Assigneeaftissue, Assigneeatissue, Assigneeaname, Cert-correction, Date, Inventor, Legal-status, Reexam-cert, Reexam-litigate, Reissue, Title  
Date/Time: Thursday, October 31, 2002 - 4:09 PM EST

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[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Multi-Source Groups](#) > [Patent Cases from Federal Courts and Administrative Materials](#) [i](#)

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\$0.65 TELNET

\$0.65 Estimated cost this search

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File 345:Inpadoc/Fam.& Legal Stat 1968-2002/UD=200242

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S1	1	PN=US 5556838

1/39/1

DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat

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17914299

Basic Patent (No,Kind,Date): US 5321012 A 19940614 <No. of Patents: 014>

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date
AT 210443	E	20011215	EP 94101282	A	19940128
CA 2113515	AA	19940729	CA 2113515	A	19940114
DE 69429376	C0	20020124	DE 69429376	A	19940128
DE 69429376	T2	20020814	DE 69429376	A	19940128
DK 608893	T3	20020402	DK 9494101282	A	19940128
EP 608893	A1	19940803	EP 94101282	A	19940128
EP 608893	B1	20011212	EP 94101282	A	19940128
ES 2169048	T3	20020701	ES 94101282	EP	19940128
JP 7133231	A2	19950523	JP 9437474	A	19940128
JP 3018133	B2	20000313	JP 9437474	A	19940128
PT 608893	T	20020531	PT 94101282	A	19940128
US 5321012	A	19940614	US 43280	A	19930406
US 5556838	A	19960917	US 245970	A	19940519
US 5654281	A	19970805	US 429114	A	19950426

(BASIC)

Priority Data (No,Kind,Date):

US 10583 A 19930128  
US 43280 A 19930406  
US 10583 B2 19930128  
US 245970 A 19940519  
US 43280 A1 19930406  
US 429114 A 19950426  
US 245970 A3 19940519

PATENT FAMILY:

AUSTRIA (AT)

Patent (No,Kind,Date): AT 210443 E 20011215

ZUSAMMENSETZUNGEN ZUR HEMMUNG DER ENTWICKLUNG VON WIDERSTANDSFAEHIGKEIT  
UND/ODER ABHAENGIGKEIT VON DROGEN (German)

Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)

Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)

Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406

Applic (No,Kind,Date): EP 94101282 A 19940128

Addnl Info: 608893 20011212

IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61P-025/36

CA Abstract No: \* 121(07)073912A



Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: German  
AUSTRIA (AT)  
Legal Status (No,Type,Date,Code,Text):  
AT 210443 R 20011215 AT REF CORRESPONDS TO EP-PATENT  
(ENTSPRICHT EP-PATENT)  
EP 608893 P 20011212  
AT 210443 R 20020415 AT UEP PUBLICATION OF TRANSLATION  
OF EUROPEAN PATENT SPECIFICATION  
(UEBERSETZUNG DER EUROPÄISCHEN PATENTSCHRIFT  
AUSGEGEBEN)

CANADA (CA)

Patent (No,Kind,Date): CA 2113515 AA 19940729  
INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON AN  
ADDICTIVE SUBSTANCE (English; French)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAYER DAVID J (US); PRICE DONALD D (US); MAO  
JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): CA 2113515 A 19940114  
IPC: \* A61K-031/485; A61K-031/33  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: English

GERMANY (DE)

Patent (No,Kind,Date): DE 69429376 C0 20020124  
ZUSAMMENSETZUNGEN ZUR HEMMUNG DER ENTWICKLUNG VON WIDERSTANDSFÄHIGKEIT  
UND/ODER ABHÄNGIGKEIT VON DROGEN (German)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): DE 69429376 A 19940128  
IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61P-025/36  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: German  
Patent (No,Kind,Date): DE 69429376 T2 20020814  
ZUSAMMENSETZUNGEN ZUR HEMMUNG DER ENTWICKLUNG VON WIDERSTANDSFÄHIGKEIT  
UND/ODER ABHÄNGIGKEIT VON DROGEN (German)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): DE 69429376 A 19940128  
IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61P-025/36  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: German

GERMANY (DE)

Legal Status (No,Type,Date,Code,Text):  
DE 69429376 P 20020124 DE REF CORRESPONDS TO (ENTSPRICHT)  
EP 608893 P 20020124  
DE 69429376 P 20020814 DE 8373 TRANSLATION OF PATENT  
DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND  
HAS BEEN PUBLISHED (UEBERSETZUNG DER

PATENTSCHRIFT DES EUROPÄISCHEN PATENTES IST  
EINGEGANGEN UND VERÖFFENTLICHT WORDEN)

DENMARK (DK)

Patent (No,Kind,Date): DK 608893 T3 20020402  
PRAEPARATER TIL INHIBERING AF UDVIKLINGEN AF TOLERANCE OVER FOR  
OG/ELLER AFHAENGIGHED AF ET VANEDANNENDE STOF (Danish)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): LYLE JOHN W (US); MAO JIANREN (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): DK 9494101282 A 19940128  
IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61K-031/73;  
A61P-025/36  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: Danish

EUROPEAN PATENT OFFICE (EP)

Patent (No,Kind,Date): EP 608893 A1 19940803  
INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON AN  
ADDITIVE SUBSTANCE. (English; French; German)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): EP 94101282 A 19940128  
Designated States: (National) AT; BE; CH; DE; DK; ES; FR; GB; GR; IE;  
IT; LI; LU; MC; NL; PT; SE  
IPC: \* A61K-031/485; A61K-031/73; A61K-031/54  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: English  
Patent (No,Kind,Date): EP 608893 B1 20011212  
COMPOSITIONS FOR INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR  
DEPENDENCE ON AN ADDITIVE SUBSTANCE (English; French; German)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): EP 94101282 A 19940128  
Designated States: (National) AT; BE; CH; DE; DK; ES; FR; GB; GR; IE;  
IT; LI; LU; MC; NL; PT; SE  
IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61P-025/36  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: English

EUROPEAN PATENT OFFICE (EP)

Legal Status (No,Type,Date,Code,Text):  
EP 608893 P 19930128 EP AA PRIORITY (PATENT  
APPLICATION) (PRIORITAET (PATENTANMELDUNG))  
US 10583 A 19930128  
EP 608893 P 19930406 EP AA PRIORITY (PATENT  
APPLICATION) (PRIORITAET (PATENTANMELDUNG))  
US 43280 A 19930406  
EP 608893 P 19940128 EP AE EP-APPLICATION  
(EUROPÄISCHE ANMELDUNG)  
EP 94101282 A 19940128

EP 608893	P	19940803	EP AK	DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT (IN EINER ANMELDUNG BENANNTE VERTRAGSSTAATEN)
				AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
EP 608893	P	19940803	EP A1	PUBLICATION OF APPLICATION WITH SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT)
EP 608893	P	19950329	EP 17P	REQUEST FOR EXAMINATION FILED (PRUEFUNGSANTRAG GESTELLT)
				950202
EP 608893	P	19960821	EP 17Q	FIRST EXAMINATION REPORT (ERSTER PRUEFUNGSBESCHIED)
				960705
EP 608893	P	20001213	EP RIC1	CLASSIFICATION (CORRECTION) (KLASSIFIKATION (KORR.))
				7A 61K 31/485 A, 7A 61K 31/54 B, 7A 61K 31/715 B
EP 608893	P	20001213	EP RTI1	TITEL (CORRECTION) (TITEL (KORR.))
				COMPOSITIONS FOR INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON AN ADDITIVE SUBSTANCE
EP 608893	P	20010110	EP RIC1	CLASSIFICATION (CORRECTION) (KLASSIFIKATION (KORR.))
				7A 61K 31/485 A, 7A 61K 31/54 B, 7A 61K 31/715 B, 7A 61P 25/36 B
EP 608893	P	20010110	EP RTI1	TITEL (CORRECTION) (TITEL (KORR.))
				COMPOSITIONS FOR INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON AN ADDITIVE SUBSTANCE
EP 608893	P	20011212	EP AK	DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION: (IN EINER PATENTSCHRIFT ANGEFUEHRTE BENANNTE VERTRAGSSTAATEN)
				AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
EP 608893	P	20011212	EP B1	PATENT SPECIFICATION (PATENTSCHRIFT)
EP 608893	P	20011212	EP REF	IN AUSTRIA REGISTERED AS: (IN AT EINGETRAGEN ALS:)
				AT 210443 R 20011215
EP 608893	P	20011214	CH EP/REG	ENTRY IN THE NATIONAL PHASE (EINTRITT IN DIE NATIONALE PHASE)
EP 608893	P	20020101	GB IF02/REG	EUROPEAN PATENT IN FORCE AS OF 2002-01-01
EP 608893	P	20020123	IE FG4D/REG	EUROPEAN PATENTS GRANTED DESIGNATING IRELAND
EP 608893	P	20020124	EP REF	CORRESPONDS TO: (ENTSPRICHT)
				DE 69429376 P 20020124
EP 608893	P	20020131	CH NV/REG	NEW AGENT (NEUER VERTRETER/NOUVEAUX MANDATAIRES/NUOVI MANDATARI)
				ISLER & PEDRAZZINI AG
EP 608893	P	20020402	DK T3/REG	TRANSLATION OF EP PATENT
EP 608893	P	20020510	EP ET	FR: TRANSLATION FILED (FR: TRADUCTION A ETE REMISE)
EP 608893	P	20020531	PT SC4A/REG	TRANSLATION IS AVAILABLE

20020301 AVAILABILITY OF NATIONAL TRANSLATION  
EP 608893 P 20020701 ES FG2A/REG DEFINITIVE PROTECTION  
(PROTECCION DEFINITIVA)  
2169048T3

SPAIN (ES)

Patent (No,Kind,Date): ES 2169048 T3 20020701  
COMPOSICIONES PARA LA INHIBICION DEL DESARROLLO DE LA TOLERANCIA Y/O DE  
LA DEPENDENCIA DE UNA SUSTANCIA ADICTIVA. (Spanish)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH  
Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): ES 94101282 EP 19940128  
Addnl Info: 608893 EP patent valid in AT  
IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61P-025/36  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: Spanish

SPAIN (ES)

Legal Status (No,Type,Date,Code,Text):  
ES 2169048 P 20020701 ES FG2A DEFINITIVE PROTECTION  
(PROTECCION DEFINITIVA)  
608893

JAPAN (JP)

Patent (No,Kind,Date): JP 7133231 A2 19950523  
FORMULATION FOR INHIBITING DEVELOPMENT OF TOLERANCE AND/OR DEPENDENCE  
FOR ADDICTIVE SUBSTANCE (English)  
Patent Assignee: BAAJINIA KAMANUERUSU UNIV MEDI (US)  
Author (Inventor): DEBITSUDO JIEI MAIYAA; DONARUDO DEI PURAISU;  
JIYANREN MAO; JIYON DABURIYUU RIRU  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): JP 9437474 A 19940128  
IPC: \* A61K-045/06; A61K-031/045; A61K-031/135; A61K-031/18;  
A61K-031/435; A61K-031/445; A61K-031/485; A61K-031/505; A61K-031/515;  
A61K-031/54; A61K-031/55; A61K-031/715; A61K-045/00; A61K-031-435;  
A61K-031-54; A61K-031-18; A61K-031-55  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 3018133 B2 20000313  
Patent Assignee: BAAJINIA KAMANUERUSU UNIV MEDE  
Author (Inventor): DEBITSUDO JEI MAIYAA; DONARUDO DEI PURAISU; JANREN  
MAO; JON DABURYUU RIRU  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): JP 9437474 A 19940128  
IPC: \* A61K-045/06; A61K-031/045; A61K-031/135; A61K-031/18;  
A61K-031/435; A61K-031/445; A61K-031/485; A61K-031/505; A61K-031/515;  
A61K-031/54; A61K-031/55; A61K-045/00; A61K-031/715; A61K-031-435;  
A61K-031-54; A61K-031-18; A61K-031-55  
Language of Document: Japanese

PORTUGAL (PT)

Patent (No,Kind,Date): PT 608893 T 20020531  
COMPOSICOES PARA A INIBICAO DO DESENVOLVIMENTO DA TOLERANCIA A E/OU  
DEPENDENCIA A UMA SUSTANCIA DE HABITUACAO (English; French; German;  
Portuguese)

Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAO JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 10583 A 19930128; US 43280 A  
19930406  
Applic (No,Kind,Date): PT 94101282 A 19940128  
IPC: \* A61K-031/485; A61K-031/54; A61K-031/715; A61P-025/36  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: Portugese

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5321012 A 19940614  
INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON A  
NARCOTIC ADDICTIVE SUBSTANCE (English)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAYER DAVID J (US); PRICE DONALD D (US); MAO  
JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 43280 A 19930406; US 10583 B2  
19930128  
Applic (No,Kind,Date): US 43280 A 19930406  
National Class: \* 514025000; 514216000; 514223500; 514225500;  
514224500; 514282000; 514231200; 514289000; 514812000; 536053000;  
536055100  
IPC: \* A61K-031/70; A61K-031/55; A61K-031/54; A61K-031/44  
CA Abstract No: \* 121(07)073912A; 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 94-191561  
Language of Document: English  
Patent (No,Kind,Date): US 5556838 A 19960917  
INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON AN  
ADDICTIVE SUBSTANCE Inhibiting the development of tolerance to and/or  
dependence on an addictive substance (English)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAYER DAVID J (US); PRICE DONALD D (US); MAO  
JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 245970 A 19940519; US 43280 A1  
19930406; US 10583 B2 19930128  
Applic (No,Kind,Date): US 245970 A 19940519  
Addnl Info: 5321012 Patented  
National Class: \* 514025000; 514216000; 514223500; 514225500;  
514224500; 514282000; 514231200; 514304000; 514305000; 514306000;  
514307000; 514812000  
IPC: \* A61K-031/70; A61K-031/54; A61K-031/44; A61K-031/445  
CA Abstract No: \* 121(07)073912A  
Derwent WPI Acc No: \* C 94-191561; C 96-433007; C 96-433007  
Language of Document: English  
Patent (No,Kind,Date): US 5654281 A 19970805  
INHIBITING THE DEVELOPMENT OF TOLERANCE TO AND/OR DEPENDENCE ON AN  
ADDICTIVE SUBSTANCE (English)  
Patent Assignee: UNIV VIRGINIA COMMONWEALTH (US)  
Author (Inventor): MAYER DAVID J (US); PRICE DONALD D (US); MAO  
JIANREN (US); LYLE JOHN W (US)  
Priority (No,Kind,Date): US 429114 A 19950426; US 245970 A3  
19940519; US 43280 A1 19930406; US 10583 B2 19930128  
Applic (No,Kind,Date): US 429114 A 19950426  
Addnl Info: 5556838 Patented; 5321012 Patented  
National Class: \* 514025000; 514216000; 514223500; 514225500;  
514224500; 514282000; 514231200; 514270000; 514304000; 514305000;  
514306000; 514307000; 514812000  
IPC: \* A61K-031/70; A61K-031/55; A61K-031/54; A61K-031/535;  
A61K-031/44; A61K-031/445  
CA Abstract No: \* 121(07)073912A

Derwent WPI Acc No: \* C 94-191561; C 96-433007  
Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No, Type, Date, Code, Text):

US 5321012	P	19930128	US AA	PRIORITY
		US 10583	B2	19930128
US 5321012	P	19930406	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 43280	A	19930406
US 5321012	P	19930406	US AS02	ASSIGNMENT OF ASSIGNOR'S
		INTEREST		
		VIRGINIA COMMONWEALTH UNIVERSITY MEDICAL		
		COLLEGE OF VIRGINIA1200 EAST MARSHAL ST ;		
		MAYER, DAVID J. : 19930401; PRICE, DONALD D.		
		: 19930401; MAO, JIANREN : 19930401; LYLE,		
		JOHN W. : 19930405		
US 5321012	P	19940614	US A	PATENT
US 5556838	P	19930128	US AA	PRIORITY
		US 10583	B2	19930128
US 5556838	P	19930406	US AA	PRIORITY
		US 43280	A1	19930406
US 5556838	P	19940519	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 245970	A	19940519
US 5556838	P	19960917	US A	PATENT
US 5556838	P	20010821	US RF	REISSUE APPLICATION FILED
		(REISSUE APPL. FILED)		
		20010615		
US 5654281	P	19930128	US AA	PRIORITY
		US 10583	B2	19930128
US 5654281	P	19930406	US AA	PRIORITY
		US 43280	A1	19930406
US 5654281	P	19940519	US AA	PRIORITY
		US 245970	A3	19940519
US 5654281	P	19950426	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 429114	A	19950426
US 5654281	P	19970805	US A	PATENT
US 5654281	P	19971021	US CC	CERTIFICATE OF CORRECTION

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US5556838 A 19960917 [US5556838]

TI

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(A) Inhibiting the development of tolerance to and/or dependence on an addictive substance

PA

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(A) UNIV VIRGINIA COMMONWEALTH (US)

IN

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(A) MAYER DAVID J (US); PRICE DONALD D (US); MAO JIANREN (US);  
LYLE JOHN W (US)

AP

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US24597094 19940519 [1994US-0245970]

PR

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US1058393 19930128 [1993US-0010583]  
US4328093 19930406 [1993US-0043280]  
US24597094 19940519 [1994US-0245970]

IC

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(A) A61K-031/44 A61K-031/445 A61K-031/54 A61K-031/70

EC

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A61K-031/485 &M  
A61K-031/54 &M  
A61K-031/73 &M

PCL

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ORIGINAL (O) : 514025000; CROSS-REFERENCE (X) : 514216000  
514223500 514224500 514225500  
514231200 514282000 514304000 514305000 514306000 514307000 514812000

DT

Corresponding document

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STG

- (A) United States patent

AB

- Nontoxic substances that block the N-methyl-D-aspartate (NMDA) receptor, e.g., a morphinan such as dextromethorphan or dextrorphan, or that block a major intracellular consequence of NMDA-receptor activation, e.g., a ganglioside such as GM1 or GT1b, a phenothiazine such as trifluoperazine or a naphthalenesulfonamide such as N-(6-aminohexyl)-5-chloro-1-naphthalenesulfonamide, inhibit the development of tolerance to and/or dependence on addictive drugs, e.g., narcotic analgesics such as morphine, codeine, etc.